HE UNITED STATES PATENT AND TRADEMARK OFFICE

JHU/APL Docket No. 1414-SPL

Examiner: G. R. Strecker

Serial No.:

09/813,767

Group Art Unit: 2862

Filed:

March 21, 2001

Inventor:

John C. Murphy

For:

APPARATUS AND METHODS USING MECHANICAL RESONATORS TO

ENHANCE SENSITIVITY IN LORENTZ FORCE MAGNETOMETERS

AMENDMENT

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Assistant Commissioner for Patents, Washington, DC 20231

on January 10, 20

Signature

Date

Assistant Commissioner for Patents Washington, D. C. 20231

Dear Sir:

In response to the Office action mailed July 10, 2002, please amend the above-referenced application as follows:

In the Specification: (See enclosure for "clean version".)

Please amend the specification as follows:

Page 3, line 13, delete "aperature" and substitute therefor -- aperture --.

Page 8, line 10, delete "place" and substitute therefor -- placed --.

Page 9, line 23, delete "44" and substitute therefor -- 46 --.

In the Claims:

Please amend claims 1, 3, 4, 6, 10, 11, 12, 18 19, 22, 24, and 25 as follows (see enclosure for "clean version"):

1. (once amended) A magnetometer comprising:

an electrically conducting string, the string receiving a current; and

means for supporting the string in tension at two locations, the string being capable of vi-

brating in any direction orthogonal to its axis;

the magnetometer being placed in a magnetic field to be detected, the magnetic field being perpendicular to the direction of the current and producing a Lorentz Force perpen-